

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-7 (Cancelled).

8 (Currently amended). A method for detection of an individual with a high probability of having an HIV infection, comprising the steps of:

- [[i]] obtaining a peripheral blood sample from said individual;
- ~~(ii) separating mononuclear cells from said peripheral blood;~~
- ~~(iii) fixing and permeabilizing said mononuclear cells;~~
- ~~(iv) incubating said fixed and permeabilized mononuclear cells with MAb's which bind to the M02 antigen under conditions enabling binding of the Mabs to said antigen;~~
- ~~(v) detecting binding of said antibodies in said cells;~~

and

determining the number of M02 positive cells in said sample;

and

~~expressing the M02 antigen internally and/or the intracellular level of M02 expression in said cells;~~

~~(vi) calculating~~ comparing the number of M02+ cells in said sample with a cutoff value based on an average number of M02+ cells or average level of M02 expression in samples obtained from healthy individuals; and,

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~~(vii) comparing the number of M02\* cells and/or level of expression of M02 in said cells measured in (v) above to said cutoff value, a measured wherein a number of M02+ cells and/or level of expression of M02 in said cells in said sample higher than the cutoff value, indicating said cutoff value indicates a high probability of the existence of an HIV infection in said tested individual.~~

9 (Currently amended). A method in accordance with Claim 8, wherein ~~following or simultaneously with the incubation of said fixed and permeabilized cells with MAbs which bind M02, said cells are also incubated with MAbs which bind T cell specific antigens and the number of Mu2+ celles~~ M02+ cells which also bind ~~said anti T cell MAbs~~ monoclonal antibodies (MAbs) specific for T-cell specific antigens in said sample ~~as well as the level of M02 expression in said cells is determined and compared to the number of cells which bind M02 and said anti-T-cell specific MAB or the level of M02 in such cells in control non-infected individuals, a higher number of M02+ cells or a higher level of M02 expression in said tested individual indicating~~ indicates a high probability of the existence of an infection in said tested individual.

10 (Original). A method in accordance with Claim 9, wherein said anti-T-cell specific antigen is CD8.

11 (Original). A method in accordance with Claim 9, wherein said T-cell specific antigen is CD4.

12(Original). A method in accordance with Claim 9, wherein said T-cell specific antigen is the gamma/delta receptor.

13(Currently amended). A method for monitoring the efficacy of [[a]] anti-HIV treatment on a cellular level in an ~~infected~~ individual infected with HIV, comprising:

~~[[i]] obtaining a peripheral blood sample from said individual;  
prior to administration of said treatment;  
(ii) separating mononuclear cells from said peripheral blood;  
(iii) fixing and permeabilizing said mononuclear cells;  
(iv) incubating said fixed and permeabilized mononuclear cells  
with MAbs which bind to the MO2 antigen under conditions  
enabling binding of the MAbs to said antigen;  
(v) detecting binding of said antibodies in said cells, and  
determining the number of MO2+ cells in said sample;  
expressing the MO2 antibody internally and/or the  
intracellular level of MO2 expression in said cells;  
(vi) administering said treatment to [[the]] said individual;  
at one or more time points during or after said treatment,  
obtaining a peripheral blood sample from said individual and  
determining the number of MO2+ cells in each sample; and  
comparing the number of MO2+ cells in the sample obtained  
prior to treatment with the number of MO2+ cells obtained during or  
after said treatment,  
wherein a significantly different number of MO2+ cells  
present in the sample obtained prior to treatment as compared to the~~

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number of MO2+ cells present in the sample obtained during or after  
said treatment indicates efficacy of said treatment

~~(vii) at various periods of time following said treatment  
obtaining a peripheral blood sample from said treated  
individual;  
(viii) determining the number of cells in said samples expressing  
the M02 antigen internally and/or the intercellular level  
of M02 expression in said cells as in step (ii) (v) above;  
(ix) comparing the number of said cells and/or said level of  
expression of M02 in the cells in the sample obtained in  
(i) to the number of said cells and/or the level of M02  
expression in samples obtained from said individual  
following treatment, a significantly different number of  
MO2+ cells or a significantly different level of expression  
of M02 in cells present in samples obtained from said  
treated individual as compared to the number of MO2+ cells  
or the level of M02 expression in cells in a sample  
obtained prior to said treatment indicating efficacy of the  
treatment.~~

14(Currently amended). A method in accordance with Claim 13,  
wherein ~~following or simultaneously with incubation of said cells in~~  
~~said (iv) with Mabs which bind the M02 antigen, the cells are also~~  
~~incubated with antibodies which bind T cell specific antigens, the~~  
number of MO2+ cells which bind said Mabs that bind monoclonal  
antibodies (Mabs) specific for T-cell specific antigens is determined  
before and after said treatment and the number of said MO2+ cells or

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~~the level of expression of M02 in said cells is compared to the number of said M02+ cells or the level of M02 expression in said cells in samples obtained from said individual prior to receiving treatment[[]], a significantly different number of said M02+ cells before and after treatment and/or of the level of expression of M02 in said cells indicating efficacy of said treatment.~~

15(Original). A method in accordance with Claim 14, wherein said additional T-cell specific antigen is CD8.

16(Original). A method in accordance with Claim 14, wherein said additional T-cell; specific antigen is CD4.

17(Original). A method in accordance with Claim 14, wherein said additional T-cell specific antigen is gamma/delta receptor.

Claims 18-20 (Cancelled).

21(Currently amended). A method in accordance with any of Claims[[8-17]] 9-12 and 14-17, wherein the MABs which bind to the M02 antigen are labeled with Red Dye No. 1 (RD1).

Claim 22 (Cancelled).